

O'ahu Invasive Species Committee (OISC): Highlights

In FY 2009, OISC continued work toward fulfilling the objectives of the HISC Response and Control working group by controlling priority invasive species and detecting and evaluating newly introduced species. OISC received \$437,200 from HISC and leveraged \$271,352 in additional funds. OISC was founded by volunteers in the late 1990's and many of those volunteers serve on OISC's steering committee to this day. In FY 2009, OISC continued to stop the spread of miconia, fountain grass and blackberry through systematic surveys and removal. OISC worked with HDOA to prevent coqui frog from establishing on O'ahu. The O'ahu Early Detection program completed surveys of City and County managed roads and documented several species of concern. The OISC field crew has begun initial removal for some of these species. OISC also conducted outreach events across the island.

HISC Response and Control Measures of effectiveness:

- 1) Number of species detected and evaluated for feasibility of eradication.
- 2) Prioritization processes identified and in place.

OISC and the Bishop Museum have partnered together to implement the O'ahu Early Detection (OED) program. The team has completed surveys of all roads managed by the City and County and discovered 131 new island records—plants never documented as being on O'ahu. These species are currently being evaluated as part of a prioritization process for plants that OISC should target in the future. The evaluation process will take into account the threat the species poses with the feasibility of eradication.



OISC field crewmember Keoki Kanakaokai controlling miconia in Ka'alaea Valley.

An example of the usefulness of this program is the discovery of Cape Ivy (*Delairea odorata*) in the Wai'anae mountains. This species is a severe problem in other temperate and tropical climates and was not previously known to be present on O'ahu. Initial control work has taken place and the species is being evaluated with the rest of the OED team's findings.

In FY 2010 with assistance from HDOT, the OED team will be surveying state roads.

HISC Response and Control Measures of Effectiveness:

- 1) Number and area of priority invasive species eradicated and/or controlled.
- 2) Number and names of species, habitats, ecosystems, agricultural, and managed areas protected because of control efforts.

Between September 1, 2007 and August 31, 2008, OISC surveyed for and controlled 33 different plant, vertebrate and invertebrate species, including miconia and coqui frog, over 6,838 acres. The drop in acreage from last year's number reflects the loss of staff due to anticipated budget cuts in 2010. Species activity highlights are described below:

- OISC crew completed 2,992 acres of miconia surveys during this period and removed 1,392 trees and saplings from the Ko‘olau Watershed. Four mature trees were found this year; one in Kahili and three in Ka‘alaea valley. No mature trees were found in the 20 other valleys in which surveys were conducted. Suitable habitat for miconia exists in the entire 100,000 acres of the Ko‘olau Watershed. It is mostly restricted to low-elevation disturbed forests, but could easily move into the native forests of the Ko‘olau summit if not constantly controlled. Volunteers contributed 294 hours to miconia work. OISC’s work protects the summit forests and the endangered flora and fauna dependent upon that ecosystem.
- Forests and summit regions of Pālolo and Maunawili Valleys are protected from Himalayan blackberry (*Rubus discolor*). This species of blackberry is only found in Pālolo Valley and was creeping toward the native forests of the Ko‘olau summit. OISC has been systematically controlling it, removing 2,255 plants over 176 acres during the reporting period.
- Following the discovery of O‘ahu’s first and only known naturalized pampas grass (*Cortaderia selloana*), OISC conducted surveys around the plant and increased its efforts at removing all populations in cultivation. In 2009, 23 plants were removed. Pampas grass has a wide elevational and environmental range. By removing this species now, summit areas of both the Ko‘olau and Wai‘anae mountains will be protected.
- OISC has protected homes and natural areas along the Wai‘anae coast from the increased risk of fire that an invasion of fountain grass would bring. OISC monitors and controls all populations west of Punchbowl and north of Lanikai.

HISC Response and Control Measures of Effectiveness:

1) Implementation of the priority response and control actions of the Aquatic Invasive Species, West Nile Virus, coqui frog, and red imported fire ant plans

In accordance with HRS 194-2 (a) (4) OISC aims to reduce and control coqui frog infestations on public lands that are near or adjacent to communities by working with the Hawaii Department of Agriculture (HDOA) to keep all coqui frogs off O‘ahu. Control efforts implemented between 2004 and 2006 removed the island’s only naturalized population of coqui frogs. No frog has been heard there since November of 2006. However, coqui frogs are continually re-introduced to O‘ahu via plants from coqui infested areas on other islands.

In partnership with the Hawai‘i Department of Agriculture, OISC did the following during 2009 to keep public lands and residential areas on O‘ahu free of coqui frogs:

- Monitored nurseries that import plants from coqui infested areas on other islands;
- Hand captured 13 frogs at the nurseries and private homes.
- Cooperated with HDOA to conduct spray operations at 4 nurseries with more serious infestations;
- Set up remote monitors at nurseries to increase efficiency of monitoring efforts.
- Conducted outreach with coqui calls to ensure the public knows how to identify the coqui call and that they should call HDOA’s pest hotline (643-PEST) if they hear one.

HISC Public Outreach Measures of Effectiveness:

1) Agency adoption of rules and policies against invasive species

- OISC, along with HDOT, submitted comments to and met with Honolulu Rail Transit to discuss measures to decrease the likelihood that construction of the proposed rail system will introduce new invasive species to O‘ahu. Transit officials agreed to use the Hawai‘i Weed Risk Assessment when choosing plants and to require that construction companies bringing heavy equipment to O‘ahu ensure that it is free of dirt, insects and plant parts.

2) Number of educational materials produced.

The OISC outreach specialist created the following educational materials:

- Information about remote monitoring for coqui frogs that will be used by nurseries.
- A video showing OISC removing miconia.
- Updated “It’s easy to be Weed Wise” brochure that informs people about the Weed Risk Assessment and which plants to avoid in landscaping.

3) Number of people reached through talks and displays.

- OISC’s outreach program incorporates the HISC outreach objectives and messages into all outreach activities. In 2009, OISC reached 4,547 people through public events and talks. OISC facilitated news coverage about miconia and is using social networking tools to reach a wider audience.

4) Number of volunteers recruited and/or referred to invasive species projects.

- OISC’s volunteer program garnered 1,096 volunteer hours to work on invasive species removal projects

Other activities:

- Participated in state-wide service trip that included personnel from each Invasive Species Committee to remove invasive species from Koke’e State Park. The combined crew of 64 people removed 28,927 Kahili ginger, 1701 smoke bush, 891 privet and 4,682 strawberry guava.
- Participated in the 2009 International Miconia Conference in Hāna, Maui. Organized by the Maui Invasive Species Committee and funded by multiple donors including HISC, the conference brought together leading invasion biologists and miconia specialists from around the world. Information gathered there has already assisted OISC to fine-tune its strategy and be more effective.
- OISC participated in the Americorps program and the HIPA/PIPES programs that introduce students to conservation work.